

GLOBAL CITIES

More than 50% of us now live in cities and, according to the United Nations, this number is set to rise to 75% by 2050. A century ago only 10% of the planet's population lived in cities.

Cities are increasingly at the centre of global flows of people, capital, culture and information. Over the last 30 years their role as financial command centres has expanded, creating a new type of sprawling, often multi-centred, urban agglomeration.

There are now over 20 mega-city regions with more than ten million people. There are also nearly 450 city regions with over one million residents. Together they house more than one billion people in a relatively small surface of the earth. As they expand even further, into urbanised regions of over 50 million inhabitants, their footprint will have a direct impact on climate change and the ecological balance of the planet, as well as on the lives of existing and new city dwellers.

This section explores some of the most populous city regions of the world – the greater Tokyo area (the largest urban region in the world today), and the expanding metropolitan zones of Mexico City and Sao Paulo. Each city displays different spatial characteristics and varying levels of success

in managing urban change through governance and policies to contain sprawl. Some of these policies, such as London's Green Belt, established by Patrick Abercrombie in 1943, can have a lasting impact on the city's ecology and liveability.

TOKYO

Tokyo, the largest city in the world and the only mega-city in a developed economy, expanded dramatically after the Second World War. Over 40% of the city is built on landfill encroaching on Tokyo Bay to accommodate this growth. However, given Japan's low demographic dynamism and the policies to curb Tokyo's growth, the city will grow at a relatively modest pace. Like many other cities in Japan, Tokyo is prone to earthquakes and flooding.

Home to a relatively wealthy and homogenous population, the city is composed of narrow building plots, closely-packed commercial districts, such as Shibuya, Shinjuku, Ginza or the new centre at Roppongi Hills. The Greater Tokyo area in the Kanto region now accommodates over 34 million people in a consistently dense and multi-centred urban

region that is well served by an integrated system of trains, underground and buses, used by nearly 80% of daily commuters.

Despite its scale and complexity Tokyo provides a highly efficient urban model and is now seeking to make more of its assets by creating denser clusters of development near the centre and regenerating its under-used waterfront along Tokyo Bay. The Governor of Tokyo is one of the most powerful figures in the Japanese administration and Tokyo receives more national fiscal resources than it contributes.

MEXICO CITY

Sprawling across a high plateau framed by mountains and volcanoes, Mexico City has expanded tenfold in both population and area since 1940. With a population of 18 million plus, the city region generates nearly a quarter of Mexico's wealth, attracting people – many of them young – from the rest of the country to the Aztecs' original 'floating city'.

The region faces a major challenge in co-ordinating services and infrastructure across the admin-

istrative boundaries of the two separate governing entities that make up Mexico City's wider metropolitan area – the Federal District and the State of Mexico. Its central tree-lined boulevards and security-guarded shops and offices contrast with the continuous spread of informal housing that clings to the steep hills and extends outwards to the horizon.

The income gap between rich and poor remains wide, and a high crime rate dominates, with security a prime concern alongside pollution and traffic congestion, exacerbated by car-oriented policy and investment, in a city where petrol is cheaper than bottled water. Fear has motivated the presence of security forces and the construction of gated residential and commercial compounds across the city.

The new city mayor is now pushing for more co-ordinated governance to control sprawl, revitalising its historic centre, introducing more sustainable transport, and starting to tackle its acute water shortage and the crumbling urban fabric that reflects decades of unstructured growth and poor resource management.

The speed with which many of the world's cities are growing affects their social and physical structure dramatically. The five cities featured in this section – Cairo, Istanbul, London, Los Angeles and Shanghai – are experiencing growth at a different pace, and absorbing it in different manners: some are growing upwards, others are growing outwards.

The speed of urban change is fuelled by natural increase as well as rural-to-urban migration, with people flocking to cities in search of jobs and social opportunities. Some cities, like London, are managing this change with planned strategies for growth. Others are overtaken by informal development processes that completely transform their scale, texture and character.

In many cases, the social and urban landscapes of these cities are being rapidly transformed by the speculative commercial development of business parks, commercial districts, shopping malls and housing enclaves. These changes directly affect the lives of existing communities and new city residents; the way in which they are managed is central to the creation of more balanced and inclusive cities in the twenty-first century.

Density – the number of people living in a given area, usually expressed as people per square kilometre – is at the centre of public debate on the future growth of cities. Used as a planning tool, awareness of density can help to curtail over-development and overcrowding, or ensure that scarce urban land is not under-used, especially in areas with good public transport and social amenities. High density does not mean high-rise; large numbers of people can be accommodated in five- or six-storey buildings arranged in a compact and efficient manner, creating congenial places for living.

Good design can produce desirable neighbourhoods in cities across the world by balancing dense development with access to open space and good transport. Dense urban environments can create sustainable cities; more dispersed developments use up more land and need more infrastructure – water, gas, electricity, roads – with negative impacts on the environment. High density housing can be associated with poverty and overcrowding, especially in the slums of developing countries. However, good design can produce desirable neighbourhoods in cities across the world by balancing dense development with access to open space and good transport – as evident in some of the most successful neighbourhoods in London, Paris and New York.

ISTANBUL

Istanbul is the eighteenth fastest-growing city in the world, adding 19 new residents each hour. With 9.8 million inhabitants, the ancient but rapidly growing city is the largest within its young country. Istanbul straddles the Asian and European continents, with an extensive waterfront on both sides of the Bosphorus. The city grew by around 900% in the past 50 years, 27% in the last decade. Further growth of 1.5 million people is projected in the next decade.

With the recent infusion of global capital and culture, the city is engaging in large infrastructure schemes. These include the Marmaray rail-tube tunnel linking its two halves, and controversial programmes for renovating its urban core and redeveloping its waterfront.

Industry is no longer the principal cog in Istanbul's economy, but it employs a third of the city's population, significantly, a third of Turkey's manufacturing plants are still in Istanbul. As industries move to the outskirts of the city, many redundant industrial areas (especially along Istanbul's extensive waterfronts) have become sites for the development of cultural institutions and facilities. This is particularly true of its Asian side, until recently, such resources have been concentrated in the historic western peninsula.

MEXICO CITY

Residential density: 5,800 people per km²
(London 4,500 people per km²)

Located on a high plateau, with few geographic boundaries to curb its growth, Mexico City has developed as a low-rise, sprawling city, the central Federal District's residential density is about 5,800 people per km², slightly higher than the relatively low density of London. But it has some denser areas: wealthier parts in the south, east and the historic centre, as well as less affluent areas such as the urbanised north.

The suburban sprawl continues to develop, fuelled by low-cost mortgages, cheap petrol and a lax regulatory framework. The municipal government has tried to re-shape the fragmented city by luring residents back into the historic centre, whose population had decreased by 40% between 1970 and 1995. But certain programmes intended to bring more people into the city centre have had the unintended effect of pricing out some residents, forcing them into the surrounding State of Mexico.

PROJECT BRAZIL 44

The current regeneration of Mexico City's historic centre involves revitalising historic structures as well as creating and upgrading commercial buildings and infrastructure. Brazil 44 is part of a federal government initiative

CAIRO

Cairo is one of the world's oldest continually-inhabited cities, centred on the river Nile and its fertile basin surrounded by desert. It is an intense palimpsest of overlapping cultures and civilizations, each of which has left its mark on the city's built heritage. The population totals 7.8 million, with almost 15 million in the greater metropolitan area, non-official figures approach 18 million. Cairo's population grew by about 890% in the past century, fuelled partly by an influx from rural areas. Current growth is calmer: 15% in the past decade. Cairo is the fifteenth fastest-growing city in the world and the third fastest in Africa, after Lagos and Kinshasa.

60% of the city's residents live in unlicensed housing, some up to 14 storeys high, but many have access to modern facilities – water, gas and electricity. 100,000 people inhabit Cairo's City of the Dead, whose small courtyard buildings, mosques and tombs provide makeshift shelter for new immigrants. The site has been occupied by the poor for several hundred years.

To redirect urban growth, Cairo's government has fostered the development of several satellite cities in desert areas poorly served by public transport. But despite heavy promotion over three decades, by 1996 the total population of these new towns was less than Greater Cairo's growth in just six months.

MUMBAI

Residential density: 34,000 people per km²
(London 4,500 people per km²)

The city of Mumbai (Bombay) covers 438 km² of Salsette Island, although almost a fifth of this area is occupied by Borivali National Park. This means the urban areas are condensed into about 350 km², with a high gross residential density, about seven times the density of London. About half the population lives in makeshift shacks with no sewers or water. Urban housing is cramped and expensive, and open public space is limited – only 1% of the city's area – and often poorly-maintained.

Mumbai's more affluent classes live in a corridor stretching along the city's north-south axis. Taller residential structures are surrounded by densely-packed, low rise slum buildings. As the city diversifies from its core industries, former mill areas and docklands offer the potential to produce affordable housing and accessible public spaces, but given current development trends, are likely to become exclusive office and

residential zones.

Lack of investment means urban infrastructure cannot meet the demands of a growing population. 85% of residents (the equivalent of the population of Norway) use public transport every day; train carriages are regularly filled well beyond their intended capacity. Mumbai is a city where the vast majority of people still walk to work, reflecting the strong link between the location of informal housing and workplaces.

PROJECT: CHIKHALWADI SANITATION PROJECT

Mumbai lacks sanitation facilities for about half its population. The absence of running water and sewerage connections is unacceptable and potentially life-threatening. Children in slums cannot compete in the long queues for scarce municipal toilets; they defecate outside their homes.

The Chikhalwadi Sanitation Project consists of community toilet blocks designed, constructed and maintained by collectives. They include separate spaces for men, women and children. Capital finance for construction comes from the state or municipalities, who also have to ensure that water and electricity are provided to the blocks.